What is Claimed is

1. A fuel supply apparatus is characterized so that a control valve and a bypass are provided downstream of a throttle valve in an intake pipe; the control valve causes air having passed through said throttle valve to flow from a main passage of said intake pipe to said bypass by closing the main passage in response to the conditions of an internal combustion engine; a device for assisting vaporization and supplying of a fuel is provided at said bypass, wherein the fuel from the device is supplied to the air caused to flow to said bypass.

2. A fuel supply apparatus is characterized so that a bypass for sending vaporized fuel to an inlet port of each cylinder of an internal combustion engine is provided separately from a main passage of an intake pipe; an inlet of said bypass is opened downstream of a throttle valve of said intake pipe; a control valve possible to close said main passage in response to the conditions of said engine is provided downstream of the inlet of said bypass; under a state where said control valve closes said main passage, air flows into said bypass and the air flow rate is controlled by said throttle valve.

3. A fuel supply apparatus, comprising:

an intake pipe for taking in air;

a throttle valve provided in a main passage of said

intake pipe to control an air flow rate;

a first fuel-injection valve provided near to an inlet port of each cylinder or directly at the cylinder of an internal combustion engine ;

a control valve provided downstream of said throttle valve to close said main passage of said intake pipe in response to the conditions of said engine;

a bypass bypassing said control valve to cause air to flow when said main passage is closed by said control valve; and

an device for assisting vaporization of a fuel provided at said bypass and having a second fuel-injection valve and a heater for heating fuel injected from said second fuel-injection valve.

4. The fuel supply apparatus according to claim 3, wherein said control valve is actuated with a vacuum.

5. The fuel supply apparatus according to claim 3, wherein said control valve is actuated with a motor.

6. The fuel supply apparatus according to claim 3, wherein fuel injected from said second fuel - injection valve is turned by said air allowed to flow to said bypass.

7. The fuel supply apparatus according to claim 3, wherein fuel is injected from said first fuel injection valve during a period from the closing of said control valve to the arrival of the fuel at said inlet port.

8. The fuel supply apparatus according to claim 7, wherein said first fuel injection valve injects once for said period.

9. The fuel supply apparatus according to claim 1, wherein said bypass is equipped with a plurality of branched passages communicated with respective combustion chambers.

10. The fuel supply apparatus according to claim 9, wherein said branched passages are connected to a position of the intake passage upstream of a main fuel injection valve mounted to an inlet port.